

MECHANICAL SUPPORT SYSTEM FOR DEVICES
OPERATING AT CRYOGENIC TEMPERATURE

ABSTRACT

A mechanical support mechanism for a device operating at cryogenic temperature where the cryogenic container vessel is situated within another larger container vessel. The apparatus provides means to secure the inner vessel to the outer vessel through a bottom-support component and a side-support component. These components consist of mating structures of different configurations that provide inner vessel with constraints for horizontal, lateral, vertical and rotational degrees of freedom while at the same time achieving minimal physical contacts between the inner and outer container vessels to reduce heat leak into the inner cryogenic container.